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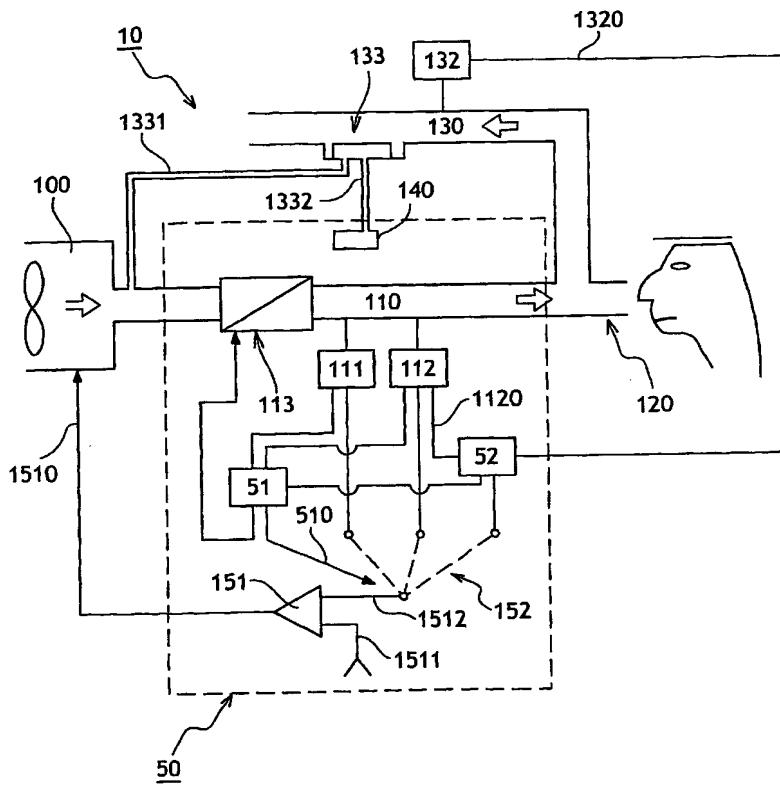
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- (71) Applicant (for all designated States except US): SOCIETE D'APPLICATIONS INDUSTRIELLES MEDICALES ET ELECTRONIQUES (SAIME) [FR/FR]; 25, rue de l'Etain, F-77176 Savigny Le Temple (FR).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): CHALVIGNAC, Philippe [FR/FR]; 37, Domaine du Bois de la Garenne, F-77760 Achères La Forêt (FR).
- (74) Agents: MARTIN, Jean-Jacques et al.; Cabinet Reginbeau, 20, rue de Chazelles, F-75847 Paris Cedex 17 (FR).
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(54) Title: BREATHING ASSISTANCE APPARATUS



(57) Abstract: This invention concerns a breathing assistance apparatus capable of operating in alternating inhalation and expiratory phases wherein; a) the control means of the apparatus comprise selection means (152) capable of selecting a pressure parameter or a flow rate parameter to define; b) the said reference value for the gas source, the said selection means are controlled by an automatic control unit (51), the said control unit being: I) connected to pressure and flow rate sensors situated on the inhalation duct to form a direct closed regulation loop for selecting a reference value parameter, II) associated to a programme allowing the selection to be made in real time from a pressure or flow rate signal, so that the association of a direct closed regulation circuit for the selection of a reference value parameter with a valve permitting proportional operation, allows real time control of barometric and volumetric operating modes of the apparatus, between the inhalation and expiratory phases and during these phases. The invention also concerns associated operating processes.



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